

What Is Claimed Is:

Sub A-1
1. An apparatus for separating individual circuit boards from a multiple board array with pre-scored planes comprising:

5 at least one splitting element positioned along one of the pre-scored planes; and

at least one torque inducing element mechanically forcing the multiple board array onto said at least one splitting element and thereby breaking the
10 multiple board array along the pre-scored plane.

2. An apparatus as described in claim 1 further comprising:

a stabilizing element exerting a load on the surface of the multiple board array and thereby
15 reducing board flex.

Sub A-2
3. An apparatus as described in claim 1 wherein said stabilizing element includes a plate element; and

a plurality of spring elements, said
20 plurality of spring elements pushing said plate element onto the multiple board array.

103 4. An apparatus as described in claim 1 wherein said at least one splitting element is wedge shaped.

25 *LD* 5. An apparatus as described in claim 1 wherein said at least one splitting element is block shaped.

6. An apparatus as described in claim 1 further comprising:

103

a transport element for automatically positioning said at least one splitting element along one of the pre-scored planes.

103

7. An apparatus as described in claim 1 wherein said transport element includes a plurality of wheels.

8. An apparatus as described in claim 1 wherein said at least one torque moving element is a pneumatic lever.

103
1037

9. An apparatus for separating individual circuit board from a multiple board array with pre-scored planes comprising:

at least one splitting element positioned along one of the pre-scored planes; and

15 at least one torque inducing element mechanically forcing the multiple board array onto said at least one splitting element and thereby breaking the multiple board array along the pre-scored plane; and

a transport element for automatically positioning said at least one splitting element along one of the pre-scored planes.

10. An apparatus as described in claim 9, further comprising:

25 a stabilizing element exerting a load on the surface of the multiple board array and thereby reducing board flex.

1037

11. An apparatus as described in claim 9 wherein said stabilizing element includes a plate element; and

a plurality of spring elements, said plurality of spring elements pushing said plate element onto the multiple board array.

12. An apparatus as described in claim 9 wherein said at least one splitting element is wedge shaped.

13. An apparatus as described in claim 9 wherein said at least one splitting element is block shaped.

14. An apparatus as described in claim 9 wherein said transport element includes a plurality of wheels.

15. An apparatus as described in claim 9 wherein said at least one torque moving element is a pneumatic lever.

16. A method for separating individual circuit boards from a multiple board array with pre-scored planes comprising:

positioning a splitting element along one of the pre-scored planes inducing torque on the multiple board array such that the multiple board array is forced onto the splitting element and breaks along the pre-scored plane.

17. A method for separating individual circuit boards as described in claim 16 further comprising:

loading the surface of the multiple board array to reduce board flex.

18. A method of separating individual circuit boards from a multiple board array as described in claim 16 further comprising:

100

add A6

[illegible]